

ATTACHMENT – CLAIMS LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) Marking tape comprising a ~~number~~plurality of passive resonant circuits each having a selected resonance frequency and having a sufficient size and dimensioning to be wirelessly detected when positioned in a hidden place such as an underground position, each resonant circuit comprising an inductive coil ~~being~~ formed by a conductive material layer on one surface of a dielectric plastic film, and a capacitor ~~being~~ formed by a conductive layer on one side of the dielectric plastic film and an oppositely positioned conductive layer on the opposite side of the dielectric plastic film, ~~characterized by~~wherein the conducting material layers (2, 3, 4) providing the coils and capacitors ~~being~~are formed on the surfaces of the dielectric plastic film (4) in such a way that the coil of each resonant circuit comprises an elongate substantially rectangular coil which is of a longitudinal extent such as to overlap the coil of the next subsequent resonant circuit in the longitudinal direction of the marking tape in order that a possible break in the marking tape results in a loss of resonance or displacement of resonance frequency of at least one of the resonant circuits.

2. (Previously Amended) Marking tape in accordance with claim 1, characterized by the inductive coils each having only a few windings, preferably one single winding.

3. (Previously Amended) Marking tape in accordance with claim 1, characterized by different resonance frequencies being provided for marking different objects.

4. (Previously Amended) Marking tape in accordance with claim 3, characterized by the capacitors being formed with finger-like patches, which can be selectively disconnected from the rest of the capacitors in order to change the resonance frequencies of the resonant circuits.

5. (Previously Amended) Marking tape in accordance with claim 1, characterized by the provision of different resonance frequencies for individual resonance circuits on the same marking tape.

6. (Previously Amended) Marking tape in accordance with claim 1, characterized by the marking tape being directly connected to or integrated in the object to be marked and detected.

7. (Previously Amended) Marking tape in accordance with claim 1, characterized by comprising a distance layer provided on at least one side of the dielectric plastic film and the conducting material layers in order to provide an isolating distance from a few micrometers to several millimetres to possible surrounding conducting materials.

8. (Previously Amended) Marking tape in accordance with claim 1, characterized by the inductive coils being of elongate form extending primarily in longitudinal direction of the marking tape.

9. (Previously Amended) Marking tape in accordance with claim 8, characterized by the inductive coils having a length of approximately 0.1-1.5 m.

10. (Previously Amended) Marking tape in accordance with claim 1, characterized by the coil winding(s) having a resistance below 1Ω .

11. (Previously Amended) Marking tape in accordance with claim 1, characterized by said marking tape being integrated in a geotextile material in order to be able to detect the integrity thereof.

12. (Previously Amended) Method of using a marking tape in accordance with claim 1, characterized by comprising the steps of:
positioning the marking tape in a vehicle-supporting structure, such as a railway track substructure or a road substructure, and

detecting the integrity of the marking tape and thus the integrity of the supporting structure by detecting the presence of and integrity of the resonant circuits of the marking tape.

13. (Previously Amended) Method in accordance with claim 12, characterized by comprising the steps of:

providing the marking tape with a predetermined number of sequentially positioned resonant circuits alternatingly having two different resonant frequencies and followed by a resonant circuit with a third resonant frequency, and

detecting the integrity of the marking tape and thus the supporting structure from a moving vehicle moving on the vehicle-supporting structure by detecting the number of frequency changes between the two frequencies before the detection of the third frequency and controlling that the counted number of frequency changes equals the predetermined number of expected frequency changes.

14. (Previously Amended) Method of using a marking tape in accordance with claim 1, characterized by comprising the steps of:

providing individual resonant circuits on individual marking tapes, said tapes being formed in accordance with a structure, on which they are to be positioned in order to be able to detect the integrity of said structures, and

mounting said individual resonant circuits on the individual marking tapes on said structures before these are hidden in an overall construction, such as e.g. the roof construction or the floor construction of a house, whereby the integrity of connections between different parts of the construction can be detected in a non-invasive manner by means of suitably constructed activating and detecting devices.